

$\frac{1}{4}$ inch in diameter throughout the entire length and had penetrated the soil in a vertical direction.

We did not find any seedlings and the plant seems not to be spreading by seeds but the colony is increasing in diameter by the underground roots. Many rosettes of young plants were found over the area and particularly around the outer edge.

Observations of the colony leads us to believe that the plant will become a very noxious weed if allowed to spread. Failure to spread by seeds may be due to the fact that the plant has been cut before the seeds were mature enough to grow or it may be that viable seeds do not form in its new habitat. These facts have not as yet been determined. There is no doubt, however, that it is able to spread and persist by its deep perennial roots.

The plant is a native of southern and middle Europe and parts of Asia and has been found in Argentina and Costa Rica but so far as we can find out it has never before been found growing in the United States.

Casually the plant would probably be mistaken for wild carrot. The leaves, however, are so different from the lace-like leaf of wild carrot that there is no difficulty in distinguishing it from that plant.

The leaves are ternately pinnate, glaucescent, the leaflets are linear-lanceolate, decurrent, finely and irregularly serrate, the teeth terminated by a sharp cartilaginous point, the middle leaflet is generally divided into three equal decurrent parts or leaflets, the lateral leaflets are irregularly divided into one to three parts or leaflets. The root leaves are long-petioled, while those on the stem have short inflated petioles. The umbels are many-rayed with both involucre and involucel of small, narrow bracts. The flowers are small with a five-toothed calyx and white incurved petals. The fruit (not mature) is oblong with widely diverging styles and filiform ribs and one oil-tube in each furrow between the ribs.

OFFICE OF STATE BOTANIST, Harrisburg, Pa.

THE NATIVE TANSY OF NEWFOUNDLAND.

M. L. FERNALD.

IN a recent valuable little collection brought back from Flower's Cove on the Newfoundland side of the Straits of Belle Isle by Miss

Mary E. Priest, and containing several plants heretofore unknown from Newfoundland, is a dwarf and lanate large-headed tansy with almost scapose stems less than 1 dm. in height. Miss Priest's plant is identical with specimens collected by Fernald, Wiegand & Kittredge in 1910 on dry limestone barrens fifty miles to the south, on the shores of Ingornachoix Bay. The Newfoundland plant seems to be an extreme variation of *Tanacetum huronense* Nutt., which in its typical form occurs from the St. John Valley in New Brunswick to Hudson Bay and Lake Superior and it is here proposed as:

TANACETUM HURONENSE Nutt., var. **terrae-novae**, n. var., a forma typica recedit habitu subscaposo, caule 0.7–1.3 dm. alto lanato; foliis confertis 3.5–9 cm. longis subtus albido-tomentosis vel -lanatis, segmentis confertis; capitulis 1–3; involucre lanato.

Differing from the typical form of the species in its subscapose habit; the stem 0.7–1.3 dm. high, lanate, 1–3-headed; leaves crowded at the base of the stem, 3.5–9 cm. long, white-tomentose or -lanate beneath, their segments crowded: involucre lanate.—NEWFOUNDLAND: dry rocky limestone barren, near sea-level, Ingornachoix Bay, August 2, 1910, *Fernald, Wiegand & Kittredge*, no. 4162 (TYPE in Gray Herb.); coast, Flower's Cove, July 26, 1921, *Mary E. Priest*, no. T, 4.

The typical continental form of the species has stems 2.5–8 dm. high, with remote leaves mostly 1–3 dm. long. It is much greener and less pubescent throughout and the stems bear 1–8 heads.

It is not impossible that *Tanacetum huronense* should be treated as a variety of *T. bipinnatum* (L.) Schz.-Bip., which extends from Russian Lapland across northern Asia to Alaska and the Mackenzie. The characters relied upon by Rydberg in the *North American Flora* to separate the two seem sufficiently clear:

"Ligules erect or ascending, decidedly concave;
heads several.....2. *T. huronense*"

"Ligules spreading, flat; heads 1-4.....4. *T. bipinnatum*"¹

but unfortunately the description of the ligules as "decidedly concave" must have arisen through study of poorly dried material. The writer has intimately known *T. huronense* for thirty years, making his first collections of it in 1893, his latest in 1922, with six other collections in the interval, and he has not noticed any conspicuously "concave" character. The ligules are often inconspicuous but in the same areas they may become quite obvious; for instance, Fernald & Long's no.

¹ Rydb. N. A. Fl. xxxiv. 238 (1916).

14,860 from Woodstock, New Brunswick, admirably shows flat ligules 4 mm. long. These are, however, as described by Rydberg, more ascending than in *T. bipinnatum*, and in this character the two are perhaps separable. The apiculate tips to the leaf-segments are identical, as are the achenes and pappus and, although the key-character above quoted gives *T. huronense* "heads several" and *T. bipinnatum* "heads 1-4," the 55 flowering stems of the former now before the writer show 9 specimens with 1 head, 11 with 2, 20 with 3 and 9 with 4 (total, 49 out of 55), while only 1 has 5 heads, 2 have 6, 2 have 7 and 1 has 8. Upon its more elevated disk and less spreading, usually more deeply lobed, ligules *T. huronense* is distinct from the scanty material at hand of *T. bipinnatum*, but the differences are so slight that, when the intermediate country between Lake Superior and the Yukon is better known, it is highly probable that exactly transitional plants will be found.

The genus *Tanacetum* is tentatively retained in its traditional sense, although Hoffmann¹ and his followers in Germany, Austria and Switzerland merge it with *Chrysanthemum*. The group is so largely Eurasian that in America we are scarcely in position properly to weigh generic values within it. Prior to Hoffmann's treatment the traditional practice in continental Europe was to consider as true *Chrysanthemum* the species such as *C. segetum* L. and *C. coronarium* L., in which the pappus is obsolete and the achenes dimorphic, at least the outer ones with 2 or 3 wing-angles. This was the treatment of Schultz Bipontinus² when he maintained *Chrysanthemum* in its most restricted sense and treated as *Tanacetum* the plants with uniform 5-10-costate achenes and coroniform pappus. The *Tanacetum* of Schultz contained very diverse elements, all of which are included by Hoffmann in *Chrysanthemum*—such plants as *T. Balsamita* L., the Costmary of old gardens, which Rydberg in the *North American Flora* maintains as a monotypic genus, *Balsamita Balsamita* (L.) Rydb. separated from *Tanacetum* because it has "Heads discoid, homogamous, *i. e.*, ray-flowers wholly wanting," thus quite ignoring the fact that typical *T. Balsamita* is a plant correctly described by Boissier "ligulis albis disco aequilongis" (*Fl. Orient.* iii. 345). Schultz also included *T. Parthenium* (*Chrysanthemum Parthenium* (L.)

¹ O. Hoffm. in Engler & Prantl, *Pflanzenf.* iv. Ab. 5: 277, 278 (1892).

² Schz.-Bip. Ueber die Tanaceteen (1844).

Bernh.), the old fashioned Feverfew; *T. atratum* (*C. atratum* L.), an alpine Marguerite closely related to our introduced Daisy or White Weed, *C. Leucanthemum* L. or *Leucanthemum vulgare* Lam.; and *T. indicum* (*C. indicum* L.), one of the progenitors of the garden Chrysanthemum. Somewhat similarly, Boissier,¹ in 1875, maintained *Chrysanthemum* in its restricted sense and threw the others, including *Tanacetum*, into *Pyrethrum*. The problem, as already said, is essentially one for the European student to settle, since the great bulk of species is Eurasian, but until there is fuller agreement among the more thorough students of Eurasian *Compositae* it seems better for us to maintain, for the present, *Tanacetum* as generically distinct from *Chrysanthemum* in the restricted sense. If *Tanacetum*, *Pyrethrum*, *Leucanthemum*, etc., constitute a single genus distinct from *Chrysanthemum*, an interpretation which has much authoritative support, the earliest generic name is, of course, *Tanacetum* L. Sp. (1753) which antedates *Leucanthemum* Mill. (1754) and *Pyrethrum* Scop. (1772).

GRAY HERBARIUM.

ISLE AU HAUT PLANTS.—During the summer of 1921, I found growing amongst various grasses on what is known as Birch Point, though there seem to be no birches there, *Luzula campestris* (L.) DC., var. *acadiensis* Fernald. This will be found described by Prof. Fernald in RHODORA, Vol. 19, p. 38, from eastern Canada. His comment on my plant is "first in Maine."

About the same time I found on York Island, which lies close to the eastern shore of Isle au Haut, a golden-rod, *Solidago lepida* DC., var. *molina* Fernald, which is also "new to New England." This was described by Prof. Fernald in RHODORA, Vol. 17, p. 9. It is mentioned in Gray's Manual (7th edition) under *S. canadensis* L., var. *gilvocanescens* Rydb., but with no footing in New England.

I wish to acknowledge Prof. Fernald's kindness in identifying both of these plants for me.—NATHANIEL T. KIDDER, Milton, Massachusetts.

¹ Boissier, Fl. Orient. iii. 335 *et seq.* (1875).